Data Sheet

We make sure

FUJITSU COMPUTERS SIEMENS

PRIMERGY RX600 S4

4-Socket Quad-Core Intel® Xeon® MP Rack Server (4U) – Guaranteed quality for consolidation and virtualization

Issue May 09, 2008

Pages 2

PRIMERGY RX servers are perfect answers for an IT strategy that seeks to downsize data center infrastructure costs by enhancing transparency of structure, management overhead and by maximizing the use of investments.

With RX rack servers and the PRIMECENTER rack enclosures, you benefit from our renowned experience in data center technology, which assures the best quality of data center operation. To guarantee heterogeneous data center assets, the PRIMECENTER modular design accommodates seamless integration of PRIMERGY, PRIMEPOWER compute nodes, storage SAN and NAS subsystems, as well as other infrastructure components such as hubs, KVM switches and more, using a universal power circuit structure.

Cost-effective scaling, simplified operation and enhanced quality of data center IT production are the main benefits in deploying PRIMERGY RX servers. Their centralized PRIMERGY Server View Suite management functions mean less troubleshooting and costs and remote access from anywhere at any time. The flexible custom supply model and our build-to-order process means that only fully built and pre-tested rack solutions are shipped to the customer – shortening your time to production.

PRIMERGY RX600 S4

Backend services such as databases and e-commerce business logic are the heartbeat of the business value chain; they deserve up-scaled performance and extreme robustness to guarantee the overall quality of IT operations.
With industry-standard operating systems, 4-way building blocks have proven to be a very cost efficient platform for consolidating multiple smaller workloads onto fewer but more powerful servers, using the latest virtualization techniques.
And as critical usage factors scale up, so do the requirements for platform resilience and advanced levels of continuous operation.
The new introduced Quad-Core Xeon MP 7300 series brings tremendous performance and performance per Watt gains.
RX600 S4 combines up to 4 Quad-Core Intel® Xeon® processors MP with exceptional internal capacity and data center-typical robustness and redundancy features into a space-optimized 4 U rack module that is designed to improve your IT production quality.

Benefits	Key Features
■ With 64-bit Intel Xeon MP and virtualization technology the processor gives your company a way to ease into 64-bit computing, as soon as the individual need of the application comes up. Virtualization offers a way to help consolidate a large number of individual small servers on one larger server, easing manageability and more efficiently using system resources	■ The new introduced Quad-Core Xeon MP 7300 series brings performance gains of up to 1.87, performance per Watt up to 2,25 times and up to 47% better performance at less than half CPU usage for virtualization versus 7140M processor
■ Enhanced server reliability without extra cost, business continuity, more value for money as well as secured data safety.	■ High Availability build-in for standard, like: SAS RAID controller with 512 MB RAID Cache, opt. BBU Hot spare memory support for pre-failure on-the-fly and memory mirroring, enhanced ECC and SDDC Hot-plug redundant fans and power supplies as standard Up to 8x hot-plug 2.5-inch SAS hard disks, Hot-plug PCIe slots LocalView display and integrated Remote Management Controller (iRMC S2) IPMI 2.0 as standard

Type	4-Socket Rack Server
System board	D 2244
Chip set	Intel® 7300
Processors	1 – 4x Intel® Xeon® MP 7000 sequence (Dual-Core 7200 series or Quad-Core 7300 series)
Model #: Clock frequency/ Second Level Cache/ TDP	E7220: 2.93 GHz / 2x4 MB / 80W E7310: 1.60 GHz / 2x4 MB / 80W E7330: 2.40 GHz/ 2x3 MB / 80W X7350: 2.93 GHz/ 2x4 MB / 130W
Memory	2 Gbyte to max. 128 Gbyte
4-way interleaved, registered Enhanced ECC DDR2 FBD667 SDRAM; 4 memory boards with 8 slots each for PC2-5300F modules 1, 2 and 4 Gbyte; memory scrubbing, SDDC (Chipkill), hot-spare memory, memory mirroring support	
Flash-EPROM	
Local BIOS update via USB; Remote BIOS-Update via LAN with Global Flash. BIOS recovery	
Interfaces	
Serial (9-pin)	2x RS-232-C
USB 2.0	3x front, 2x rear (OHCI, 480 Mbit/s)
Graphics (15-pin)	2x VGA (1x front, 1x rear)
LAN	4x RJ45 Gbit/s, plus 1x 10/100 Mbit/s for iRMC (can be switched shared on Gbit port)
Front Panel	
On/off switch; NMI-, reset button; LEDs for global error (amber/ yellow for Health and CSS), identification (blue), hard disks access (green), power (amber/green); (back: global error, identification, LAN activity, LAN mode) LC-Display (LocalView) for service	
Onboard controller **	
SATA (ESB2E)	1x for DVD drive
SAS (LSI1078)	8-Port SAS RAID 0, 1, 10, 5, 50, 6, 60 controller in PCIe slot with 512 MB RAID Cache, optional BBU
LAN (Intel® ESB2E/Zoar)	4x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration) (PXE-Boot via LAN from PXE server)
Server management	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory) incl. graphics controller, IPMI 2.0 compatible
TPM (option)	FTMicro / 1.2
Hard disk drives	36, 73, 146 Gbyte 2,5-inch SAS
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
I/O Slots	
4x PCI-Express x8, hot-plug (1x half length) 3x PCI-Express x4, (1x half length) 1x PCI-Express x4, (occupied with LSI1078 RAID controller)	
Drive bays	
for hard disks	max. 8 x 2.5/1-inch SAS
for Server Management	1 x 3.5/0.5-inch for ServerView Local Status Display
for optional accessible drives	1 x 5.25/0.5-inch for CD-RW / DVD 1x 5.25/1.6-inch for tape drive
System fans (hot-plug)	
Redundant hot-plug fans (4 x 2) as standard	
Electrical values	
Redundant hot-plug power supply units as standard (1+1) 1570W each	
Rated AC voltage	110- 240 V
Frequency	50 - 60 Hz
max. apparent power	1305 VA
max. effective power	1150 W
max. mains current	5.44 A (240V)
max. heat dissipation	4,066 kJ/h (3,853 BTU/h)

Temperature/Noise/Dimensions/Weight	
Ambient temperature	10°C - 35°C (DIN IEC 721-3-3) class 3K2, ETSI 300 019-2-3 Class 3.1
Air flow rate	max. ca. 6.5 m³/min
Declared noise emission according to ISO 9296	idle* operating* (*ISO 7779) ETSI 300 753 Class 3.1
L_{WAd} (1 B = 10 dB) :	7.0 B 7.0 B
L_{pAm} (bystander position):	55 dB 55 dB
Overall measures	176 x 482.6 x 737 mm
Rack mount depth: Rack height units: Rack cable depth:	700 mm 4 U 100 mm (1000 mm Rack recommended)
Rack integration kit	telescopic rails with full or partial extraction / cable management optional
Weight	ca. 40 kg (configuration dependent)
Compliance with Norms and Standards	
Product safety	
Global / Europe	IEC 60950-1 / EN 60950-1
USA	UL 60950-1
Canada	CAN/CSA-C22.2 No. 60950-1
Electromagnetic compatibility	
This product and the released accessories, are in compliance with emission class A. In certain cases measures have to be taken to reduce the electro magnetic influence to other equipment.	
Europe	EN 55 022 class A, EN 55024, EN61000-3-2, EN61000-3-3, ETSI EN 300386
Taiwan / Japan	CNS 13438 class A / VCCI class A
Australia / New Zealand	AS / NZS 3548 class A
USA / Canada	CFR47, part 15, subpart B, class A / ICES-003 class A
Declaration of conformity	
Europe (CE)	2004/108/EC(EMV);2006/95/EC(LVD))
North America	FCC class A
Approvals	
Product safety	
Global / Europe	CB / CE
USA / Canada	CSA_{US} / CSA_{C}
There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons, can be applied for on request.	
Supported server operating systems	
See actual release status operating systems: e.g. Windows Server 2003; Windows Server 2008, Novell SUSE Linux Enterprise Server , Red Hat Enterprise Linux; VMware ESX (Support of Debian, Ubuntu, Mandriva Linux and other Linux derivatives on demand)	
** For supported controllers (onboard and PCI cards for SAS, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.	
Server Management (see separate data sheets)	
Standard:	Primergy ServerView Suite; PDA, ASR&R ServerView Local Status Display
Optional:	iRMC S2 Advanced Pack, RemoteView

Published by

Fujitsu Siemens Computers
http://www.fujitsu-siemens.com/

Company stamp